

# On the Origin of Beliefs about the Sexual Orientation and Gender-role Development of Children Raised by Gay-male and Heterosexual Parents: An Italian Study

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## Abstract

In three studies, heterosexual participants were presented with descriptions of heterosexual and gay-male parents. Importantly, the level of gender-role conformity of the gay-male parents was experimentally manipulated, resulting in their level of gender-role conformity ranging from high to low. Compared to the son of a heterosexual couple, the son of all gay-male couples had a lower expected likelihood of developing as heterosexual. This result was independent of the level of gender-role conformity of the gay-male couples (study 1–3). The beliefs about the gender-role development of the son, in terms of anticipated masculinity (study 1), gender stereotyping (study 2), and affective adjustment (study 3), mapped onto the level of gender-role conformity of the parents, regardless of their sexual orientation. Also, heterosexual parents were consistently judged more positively than gay-male parents, independently of their level of gender-role conformity (study 1–3).

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Results were discussed within the theoretical framework of stereotypes about gay-male parenting.

**Keywords**

same-sex families, sexual orientation, gay-male parents, gender-role conformity, stereotypes

Opponents of extending parenting rights to gay and lesbian couples often base their claims upon beliefs that gay and lesbian individuals are unfit for parenthood (e.g., Crawford et al. 1999; Lingiardi and Carone 2016a, 2016b; Morse, McLaren, and McLachlan 2008) and in concerns about the welfare of children raised by gay and lesbian couples (e.g., Carone et al. 2017; Clarke 2001; Folgerø 2008; Frias-Navarro and Monterde-i-Borth 2012; Hollekim, Slaatten, and Anderssen 2012; Ioverno et al. 2018). In contrast to these beliefs, research carried out in different countries has demonstrated that children raised by gay and lesbian parents do not differ from children of heterosexual parents in terms of social and psychological development (e.g., Allen and Burrell 2002; Miller, Kors, and Macfie 2017; Fedewa, Black, and Ahn 2015; Patterson 2017) or in relation to their gender identity or sexual orientation (Bigner 1999; Gottman 1990; Webb, Chonody, and Kavanagh 2017). Despite this evidence, it is still commonly believed that children raised by gay and lesbian couples (1) experience confusion about their gender identity, (2) develop a homosexual orientation, (3) have lower levels of psychological adjustment, and (4) have a higher probability of being bullied than children raised by heterosexual couples (e.g., Baiocco et al. 2013; Biblarz and Stacey 2010; Clarke 2001; Fisher et al. 2017; Folgerø 2008; Hollekim, Slaatten, and Anderssen 2012; Pascual-Soler et al. 2017).

Since these beliefs may influence voting behaviors on issues related to same-sex parenting (e.g., Irish/Slovenian referendum on equality; O'Connor 2017), impact on judicial decisions regarding child custody, and bias public policies ruling adoption and foster care (Ricketts and Achtenberg 1989), an understanding of the specific assumptions that selectively back these beliefs is highly needed both at the theoretical and applied level. The current set of studies seeks to gain a deeper understanding of the social and psychological underpinnings of the beliefs about children raised by gay-male parents and the attitudes toward these parents. Specifically, we intend to analyze whether information about the sexual orientation of the parents *and* the degree to which gay-male parents conform to gender roles (i.e., conformity to a set of stereotypical characteristics and behaviors associated with a binary and mutually exclusive representation of gender roles) might have a different impact on distinct beliefs about children raised by gay-male parents and also on attitudes toward these parents. We limited our investigations to gay-male parents for two different, albeit related reasons. First, lesbian individuals planning to have children are evaluated

more positively than heterosexual women, regardless of whether or not they intend to have children (Rowlands and Lee 2006). Also, lesbian parents have been perceived more favorably than gay-male parents (at least in some cultural contexts, e.g., Australia; Camilleri and Ryan 2006). Second, masculinity in general and beliefs about male-gender roles are extremely sensitive to disconfirmation (Bosson and Michniewicz 2013; Glick et al. 2007), and gay men, more so than lesbian women, are believed to be at odds with such societal prescriptions, at least in some cultural contexts (Kite and Deaux 1987, 90; Euleteri and Lingiardi, 2008). Thus, relying on gay-male rather than lesbian couples seems to represent the most fertile ground for our investigation, albeit restricting the external validity of our results (for similar claims, see Tuscherer and Hugenberg 2014).

Several studies have addressed the interplay between sexual orientation and gender-role conformity information on the evaluation and stereotyping of gay and lesbian individuals (e.g., Hunt et al. 2016; Salvati et al. 2016). However, despite some correlational studies (McLeod, Crawford, and Zechmeister 1999), no experimental studies have addressed whether sexual orientation and gender-role conformity information about gay-male parents independently influence beliefs about the development of their children and the evaluation of these parents. To fill this gap, in three studies, we presented heterosexual participants with gay-male parents who differed in their levels of gender-role conformity, and compared participants' beliefs about the son raised by those parents to their beliefs about a son raised by a gender-role-conforming heterosexual couple.

Also, attitudes toward these gay-male parents and heterosexual parents were assessed. In so doing, this research program contributes to the literature on the social appraisals of gay men, by extending the analysis of the interplay between sexual orientation and gender-role conformity information to a novel target, namely to gay-male parents and their son.

It is worth noting that this research program was run in Italy. The Italian cultural context is characterized by high levels of sexual prejudice and stigmatization of gay and lesbian individuals (Eurobarometer 2012; International Lesbian, Gay, Bisexual, Trans and Intersex Association [ILGA] 2017). Also, a survey conducted on a representative sample of Italians revealed that only 20 percent of respondents supported same-sex parenting (Istituto Nazionale di Statistica 2012). More recently, ILGA (2017) classified European countries along a continuum ranging from 100 percent, namely, "respect of human right, full equality," to 0 percent, that is "gross violation of human rights, discrimination." Italy turned out to be ranked around 30 percent and, among the European Union (EU) countries, occupied one of the lowest positions on this dimension. Research conducted on Italian samples and in a cross-cultural design has demonstrated that the endorsement of religious beliefs and being politically conservative, among other factors, contribute to sexual prejudice (Lingiardi et al. 2016; Worthen, Lingiardi, and Caristo 2017). Differently to other EU countries, same-sex civil partnerships, but not same-sex parenting rights, were

legally recognized in Italy in 2016. Hence, this cultural context represents a fertile ground for our investigation.

## **Beliefs about the Development of Children Raised by Gay-male Parents and Attitudes toward These Parents**

Experimental research has typically manipulated the sexual orientation of the parents and has reported that participants expect a child raised by a gay or a lesbian couple to have lower likelihood of developing a heterosexual orientation and a higher likelihood of experiencing gender identity confusion (Crawford and Solliday 1996; Crawford et al. 1999; Gato and Fontaine 2013; McLeod, Crawford, and Zechmeister 1999). Notwithstanding the relevance of these results, the above-quoted studies have not manipulated the sexual orientation of the parents and the gender-role conformity versus *nonconformity* of these parents in an orthogonal, independent fashion. Given this limitation, the distinct role played by the beliefs about parents' sexual orientation and their level of gender-role conformity on the sexual orientation and gender-role development of the son raised by these parents remains unaddressed. Indeed, gay and lesbian individuals are often believed to display features and characteristics that match their heterosexual counterparts of the opposite rather than the same sex (Blashill and Powlishta 2009; Kite and Deaux 1987). In other words, gay men are perceived as being at odds with their male-based gender-role descriptive and prescriptive norms (Glick et al. 2007; Hunt et al. 2016), and these beliefs also extend to the appraisal of gay-males as parents, who are frequently stereotyped as effeminate or more generally as nonmasculine (McLeod, Crawford, and Zechmeister 1999). Hence, experimentally manipulating the category information about the sexual orientation of the parents (Crawford and Solliday 1996; Crawford et al. 1999; Gato and Fontaine 2013; McLeod, Crawford, and Zechmeister 1999) might have inadvertently made cognitively accessible the stereotypical information about the gender-role *nonconformity* of gay and lesbian individuals (Blashill and Powlishta 2009; Kite and Deaux 1987; McLeod, Crawford, and Zechmeister 1999), and this knowledge can likely bias subsequent judgments on the development of children raised by gay and lesbian parents and the attitudes toward these parents (e.g., Kawakami, Dovidio, and Dijksterhuis 2003).

In the present set of studies, we experimentally varied the degree to which gay-male parents displayed gender-role conforming attributes (for a similar manipulation, see Corley and Pollak 1997), ranging from a high level of gender-role conformity (i.e., both parents display stereotypically masculine attributes) to a low level of gender-role conformity (i.e., both parents display stereotypically feminine attributes). Also, we relied on heterosexual, gender-role conforming parents as a comparison, control condition. We assessed participants' expectations about the sexual orientation of the son. Also, we assessed the anticipated gender-role conformity of the son using different measures such as the expected gender-role development (i.e., the extent to which the son would develop to be masculine), the

anticipated gender stereotyping (e.g., the extent to which the son would prefer to play football [vs. being interested in fashion]), and the anticipated psychological adjustment on gender-stereotypical dimensions (e.g., affective development).

Two alternative hypotheses could be put forward. First, the sexual orientation and the gender-role conformity of the gay-male parents would independently influence these different aspects of the son. An ostensible social learning mechanism (Frias-Navarro and Monterde-i-Bort 2012; McLeod, Crawford, and Zechmeister 1999) could be believed to be at work—in this case, the son would be modeling his sexual orientation and his gender-role conformity upon the models he has been exposed to during his childhood. Hence, compared to a son raised by heterosexual parents, a son raised by gay-male parents would be expected to have a higher likelihood of being gay. This should occur regardless of the gay-male parents' levels of gender-role conformity (i.e., regardless of whether the gay-male parents are portrayed as masculine or feminine). Also, the gender-role conformity of the son would be expected to map onto the gender-role conformity of the parents, regardless of their sexual orientation. This makes for a different set of predictions based on the level of gender-role conformity of the gay-male parents: the son of heterosexual parents and the son of gay-male parents who display gender-role conforming features would be equally expected to develop in a gender-role conforming manner, while the son of gay-male parents who display gender-role nonconforming features would be expected to develop in a less masculine fashion.

Second, additional evidence has shown that the general public may believe a male child who displays female stereotypical characteristics will have a higher chance of becoming a gay-male adult than male children who display male stereotypical characteristics (Martin 1990, 1995; see also Blashill and Powlishta 2009). Hence, the sexual orientation of sons raised by gay-male parents should be associated with the anticipated gender-role development of these sons (McLeod, Crawford, and Zechmeister 1999). In other words, participants would believe that the son raised by heterosexual parents and the son raised by gay-male gender-role conforming parents should display similar levels of gender-role conforming development, and this would lead to a heterosexual orientation development. By contrast, the son raised by gender-role nonconforming gay-male parents would be thought to develop in a gender-role nonconforming manner, and this would result in a homosexual orientation development.

The anticipated sexual orientation and/or the hypothesized gender-role conformity of children raised by gay-male parents can further influence the estimated likelihood that these children will be bullied. Indeed, children raised by gay or lesbian parents are believed to be more frequently targets of bullying episodes than children of heterosexual couples (Clarke 2001; Pennington and Knight 2011). An ancillary aim of this set of studies was to clarify the role of the sexual orientation of the parents and/or the gender-role conformity of the gay-male parents in shaping the beliefs in question. Based on the abovementioned evidence, one could expect that a son raised by gay-male parents, rather than by heterosexual parents, was thought to

be more likely to be bullied. Alternatively, one could anticipate that the degree of gender-role conformity of the gay-male parents accounted for the anticipated likelihood of a son to be bullied. Specifically, participants would believe that the son raised by heterosexual parents and the son raised by gay-male gender-role conforming parents would experience similar levels of bullying and that this should be less than the amount experienced by a son raised by gender-role nonconforming gay-male parents.

Finally, we sought to analyze participants' attitudes toward gay-male parents. The participants' evaluations of gay-male parents could be driven by two sources of information, each pertaining to the characteristics of the parents (i.e., their sexual orientation and gender-role conformity). The evaluative attitudes toward gay-male parents could be driven by the prevalent negative evaluations associated with gay men as a group (Morse, McLaren, and McLachlan 2008; Gato and Fontaine 2016). Hence, predictions based on sexual prejudice would predict a more positive evaluation of the heterosexual parents than the gay-male parents, regardless of their levels of gender-role conformity. Alternatively, previous research has demonstrated that individuals, especially men, who are gender-role nonconforming, namely, that display nonmasculine attributes, receive harsher evaluations than gender-role conforming individuals (Glick et al. 2007; Glick, Wilkerson, and Cuffe 2015; Hunt et al. 2016; Salvati et al. 2017). Hence, attitudes toward gay-male parents could be sensitive to their level of gender-role conformity, thus leading to a more negative evaluation of gay-male parents who display gender-role nonconforming than conforming attributes (McLeod, Crawford, and Zechmeister 1999).

## Study I

### *Method*

*Participants.* Eighty undergraduate Italian students took part in the experiment. Two participants selfdefined as neither heterosexual nor gay/lesbian, and one participant did not indicate their sexual orientation. These participants were excluded from the experimental sample, which comprised forty-two women and thirty-five men, whose ages ranged from eighteen to twenty-eight years ( $M = 21.23$ ,  $SD = 1.97$ ).

*Procedure.* Participants responded to a pen-and-paper questionnaire presented as an opinion survey on the development of children raised in different families. Participants read that they would receive a brief description of the parents' personality and that they would form an impression of them.

Participants received four descriptions pertaining to four distinct sets of parents (counterbalanced order across participants), all of whom were described as having a single son. Participants were explicitly told the sexual orientation of the parents in each parent description. In one description, parents were overtly categorized as heterosexual (i.e., "they, a heterosexual couple"), while in the remaining three

descriptions they were defined as gay (i.e., “they, a gay couple”). Each parent was individually introduced by their first name (e.g., Marco and Paola, for the heterosexual parents; Enrico and Luca, for the gay-male parents), thus accentuating the gay-male versus heterosexual categorization of the parents. Each individual parent was described by four traits/behaviors. These traits/behaviors were taken from research on gender stereotyping (Cadinu, Latrofa, and Carnaghi 2013; Carnaghi and Maass 2007; Eagly and Steffen 1984; Rudman, Greenwald, and McGhee 2001) and comprised masculine (i.e., independent, selfconfident, competitive, resilient, dynamic, decisive, superior, vigorous, risk-taker, sturdy, energetic, leader, strong, pragmatic, competent, and experienced) and feminine stereotypical traits/behaviors (i.e., helpful, aware of other’s feeling, warm, gentle, emotional, devoted, kind, understanding, sentimental, homely, orderly, sensitive, good-natured, supportive, lenient, and caring). In the heterosexual couple (i.e., He), the man was described by masculine stereotypical traits/behaviors, while the woman was described by feminine stereotypical traits/behaviors. In one gay-male couple (i.e., G), both parents were described by masculine stereotypical traits/behaviors (i.e., gay-male parents both described as masculine [GMM]). In another gay-male couple, one man was described by masculine while the other by feminine stereotypical traits/behaviors (i.e., gay-male parents, one described as masculine and one as feminine [GMF]). In the final gay-male couple, both parents were described by feminine stereotypical traits/behaviors (i.e., gay-male parents both described as feminine [GFF]). To control for effects caused by the experimental material, we varied across participants the attribution of specific stereotypical traits/behaviors to a given individual parent, thus setting up four different versions of the same parent description. For sake of clarity, we report one of the four different versions of the parent descriptions:

- He: Marco was described as independent, competent, selfconfident, and risk-taker; Paola was described as aware of others’ feeling, emotional, good nature, and orderly.
- GMM: Luigi was described as strong, dynamic, resilient, and decisive; Giulio was described as experienced, sturdy, energetic, and pragmatic.
- GMF: Enrico was described as vigorous, leader, superior, and competitive; Luca was described as sensitive, helpful, warm, and caring.
- GFF: Gianni was described as sentimental, supportive, homely, and understanding; Enzo was described as gentle, kind, lenient, and devoted.

After reading each parent description, participants indicated the extent to which each parent was masculine/feminine by means of a seven-point scale, ranging from 1 (*fully masculine*) to 7 (*fully feminine*). Using the same scale, participants then predicted the extent to which the son would be masculine/feminine once he grew up. Participants indicated the likelihood that the son would develop a heterosexual, bisexual, and homosexual sexual orientation on seven-point scales, ranging from 1 (*not at all likely*) to 7 (*very much likely*). Finally, to assess participants’ evaluation

of the parents, they were asked how their neighbors would react if that family moved into their neighborhood. Participants reported their response on a bipolar scale ranging from  $-3$  (*very negative*) to  $+3$  (*very positive*).

At the end of the questionnaire, participants reported their own gender, age in a free format response, and their sexual orientation on a seven-point scale, ranging from 1 (*totally homosexual*) to 7 (*totally heterosexual*).

## Results

**Manipulation check.** Participants' ratings on the perceived masculinity/femininity of the individual parents were averaged within each gay-male parent description and analyzed by means of a 3 (parent description: GMM vs. GMF vs. GFF)  $\times$  2 (participant gender: female vs. male) mixed-design analysis of variance (ANOVA), with the former variable as a within-participants factor and the latter as a between-participants factor. Results indicated a significant main effect of the parent description  $F(2, 74) = 41.16, p < .001, \eta_p^2 = .53$ . Specifically, pair-wise comparisons (Bonferroni's correction) indicated that the GMM ( $M = 2.57, SE = .12$ ) was rated as more masculine than the GMF ( $M = 3.21, SE = .10; p < .001$ ) and the GFF ( $M = 3.98, SE = .14; p < .001$ ), and these last two parent descriptions also differed from each other ( $p < .001$ ). The main effect of participant gender was significant  $F(1, 75) = 15.06, p < .013, \eta_p^2 = .08$ , showing that women ( $M = 3.51, SE = .14$ ), compared to men ( $M = 3.00, SE = .15$ ), rated all targets as more masculine. Importantly, participant gender did not significantly interact with parent description  $F(2, 74) = 1.16, p = .32, \eta_p^2 = .03$ . This statistical model examined the perceived masculinity/femininity of gay-male individuals across gender-role conforming and nonconforming male descriptions. Differently from the GMF and GFF parent description, in the He parent description, there is a congruency between the gender of the parent (i.e., woman) and the parent's gender-role description (i.e., feminine). Hence, higher scores for the woman included in the He parent description would mean higher gender-role congruency, while higher scores for the gay-male parents would indicate higher gender-role noncongruency. For this reason, the He parent description was not entered in the abovementioned ANOVA.

**Anticipated gender role of the son.** Participants' ratings were analyzed by means of an ANOVA, 4 (parent description: He vs. GMM vs. GMF vs. GFF)  $\times$  2 (participant gender: female vs. male), with the former variable as a within-participants factor and the latter as a between-participants factor. Results indicated a significant main effect of the parent description  $F(3, 73) = 9.26, p < .001, \eta_p^2 = .28$  (see Table 1). Pairwise comparisons (Bonferroni's correction) indicated that participants perceived the son of the He and the GMM as masculine ( $p = 1$ ) to a similar extent. Also, the son of the GMF was perceived as being similarly masculine as the son of the He ( $p = .26$ ) and slightly less masculine than the son of the GMM ( $p = .06$ ), although this difference was not significant. The son of the GFF was perceived as less masculine than the



**Table 1.** Mean (and Standard Error) Scores for Anticipated Gender Role and Sexual Orientation of the Son as a Function of Parents' Sexual Orientation and Gender Role of Gay-male Parents in Study 1.

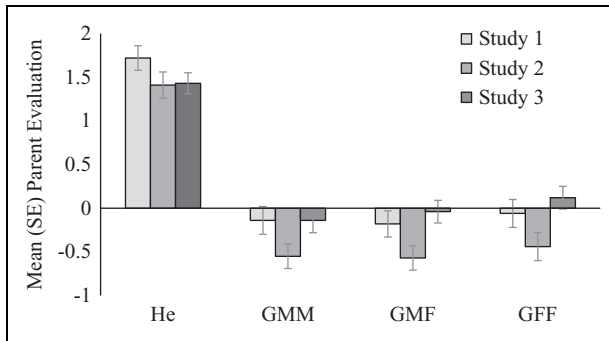
Variable	Scoring	He	GMM	GMF	GFF
Son's anticipated gender role	1–7: High score = feminine	3.04 (0.14) <sup>a</sup>	3.05 (0.13) <sup>a</sup>	3.29 (0.13) <sup>a</sup>	3.68 (0.15) <sup>b</sup>
Son's anticipated heterosexual orientation	1–7: High score = straight	5.29 (0.14) <sup>a</sup>	4.81 (0.15) <sup>b</sup>	4.78 (0.14) <sup>b</sup>	4.64 (0.15) <sup>b</sup>
Son's anticipated homosexual orientation	1–7: High score = gay	3.32 (0.16) <sup>a</sup>	3.64 (0.15) <sup>a,b</sup>	3.65 (0.16) <sup>a,b</sup>	3.76 (0.16) <sup>b</sup>

Note:  $n = 80$ . He = heterosexual couple; GMM = gay-male parents both described as masculine; GMF = gay-male parents, one described as masculine and one as feminine; GFF = gay-male parents both described as feminine. Mean scores with different superscript letters statistically differ from each another.

sons of all the other parent descriptions ( $ps < .02$ ). The main effect of participant gender  $F(1, 75) = 0.64$ ,  $p = .43$ ,  $\eta_p^2 = .01$  and the participant gender by parent description interaction  $F(3, 73) = 1.12$ ,  $p = .32$ ,  $\eta_p^2 = .05$  were not significant.

**Anticipated sexual orientation of the son.** Participants' ratings on the sexual orientation items were analyzed by means of an ANOVA, 4 (parent description: He vs. GMM vs. GMF vs. GFF)  $\times$  3 (child sexual orientation: heterosexual vs. bisexual vs. homosexual)  $\times$  2 (participant gender: female vs. male), with the two former variables as within-participants factors and the latter as a between-participants factor. A main effect of sexual orientation was found,  $F(2, 74) = 23.03$ ,  $p < .001$ ,  $\eta_p^2 = .38$ , which was further qualified by the interaction with the parent description,  $F(6, 70) = 3.19$ ,  $p < .01$ ,  $\eta_p^2 = .22$  (see Table 1). Participants reported that it was more likely that the son raised by the He would develop as heterosexual than the son raised by the GMM ( $p < .001$ ), the GMF ( $p < .001$ ), and the GFF ( $p < .001$ ). No differences occurred between the gay-male parent descriptions on the variable in question ( $ps > .5$ ). Also, as far as the estimation of the bisexuality of the son is concerned, no difference occurred between parent descriptions  $F(3, 73) = 2.03$ ,  $p = .12$ ,  $\eta_p^2 = .08$ .

Participants reported that it was less likely that the son raised by the He would be gay than the son of the GMM ( $p = .06$ ), the GMF ( $p = .08$ ), and of the GFF ( $p < .04$ ), although only the last comparison was significant. No differences occurred between the homosexual parent descriptions on the variable in question ( $ps = 1$ ). The sexual orientation by parent description by participant gender interaction was not significant,  $F(6, 70) = 1.35$ ,  $p = .25$ ,  $\eta_p^2 = .10$ .



**Figure 1.** Parent evaluations as a function of parents' sexual orientation and gender role of gay-male parents. He = heterosexual couple; GMM = gay-male parents both described as masculine; GMF = gay-male parents, one described as masculine and one as feminine; GFF = gay-male parents both described as feminine.

*Evaluation of the parents.* Participant evaluations of the parent were analyzed by means of an ANOVA, 4 (parent description: He vs. GMM vs. GMF vs. GFF)  $\times$  2 (participant gender: female vs. male), with the former variable as a within-participants factor and the latter as a between-participants factor. Results indicated a significant main effect of the parent description  $F(3, 73) = 38.56, p < .001, \eta_p^2 = .61$  (see Figure 1). Pairwise comparisons showed that participants reported a more positive evaluation of the He ( $M = 1.72, SE = .14$ ) than all the gay-male parent descriptions (i.e., GMM:  $p < .001$ ; GMF:  $p < .001$ ; GFF:  $p < .001$ ). No differences were found between the gay-male parent descriptions ( $ps > .63$ ). No significant effect of participant gender was found,  $F(1, 75) = 0.91, p = .34, \eta_p^2 = .01$ . The parent description by participant gender interaction was not significant  $F(3, 73) = 2.39, p = .08, \eta_p^2 = .09$ .

## Discussion

Findings confirmed that we successfully created gay-male parent descriptions that were decreasing in masculine-gender-role conformity. Indeed, the GMM parent description was perceived as the most masculine, the GFF as the least masculine, and the GMF fell in between. This pattern of results would allow us to rely on this manipulation in the subsequent studies. The anticipated gender role of the son seemed to rely on the belief that the child modeled his own gender on that of his parents. Indeed, the son was judged to develop as more masculine in the GMM than in the GFF, and the judgment of the son in terms of masculinity in the GMF fell in between—albeit the difference between these two last conditions was not statistically significant. Importantly, participants anticipated a similar masculine development of the son raised by He, GMM, and GMF parents. We predicted the anticipated sexual orientation of the son was more likely to be heterosexual when the parents

were heterosexual than when the parents were described as being gay. Importantly, no differences occurred between the different gay-male parent descriptions. The estimated likelihood of the son developing as gay was lower with heterosexual parents than with gay-male parents, albeit this pattern fell short of significance.

In sum, the anticipated sexual orientation and gender-role conformity of the son seem to be driven by an ostensible learning mechanism that guides the development of the son in this respect.

Importantly, the anticipated sexual orientation and gender-role conformity of the son are dissociated and depend on two different sources of information. First, the level of gender-role conformity of the gay-male couples shapes the beliefs about the gender-role conformity of the son, regardless of the parents' sexual orientation. Indeed, as no differences occurred on this dimension between the heterosexual couple and those gay-male couples that were perceived to be masculine, the sexual orientation information did not influence participants' evaluation of the anticipated gender-role conformity of the son. Second, participants based their judgments about the sexual orientation of the son exclusively on the parents' sexual orientation, regardless of the degree of gender-role conformity of the gay-male parents. Indeed, the son of the heterosexual parents was thought to have a higher chance of developing a heterosexual orientation than the sons of all of the gay-male parents. Finally, the evaluative reactions triggered by the gay-male parents were not affected by their degree of gender-role conformity. In fact, participants expressed less positive attitudes toward all gay-male parents than the heterosexual parents.

The second study was designed to replicate these findings. In study 1, participants rated the perceived gender-role conformity of the parents and the son on a similar scale. Given the analogy between these scales, one may put forward that participants anchored their judgments about the son to their judgments about the parents. If this were the case, then the fact that participants did not take into account the sexual orientation of the parents when estimating the gender-role conformity of the son was due to an anchoring effect rather than to the hypothesized beliefs about a gender-role conformity learning mechanism. To address this limitation, in study 2, we asked participants to hypothesize the son's preference for a series of gender-stereotypical activities namely feminine and masculine stereotypical activities. Also, in study 2, the anticipated sexual orientation of the son was measured by a single item (Kinsey's scale), thus increasing the external validity. Finally, in study 2, we intended to gather initial evidence on the impact of the sexual orientation and gender-role conformity of the parents on the perceived likelihood that the son will be bullied.

## Study 2

### *Method*

**Participants.** Seventy-two Italian undergraduate students took part in the experiment. Four participants selfdefined as neither heterosexual nor gay/lesbian and two

participants selfdefined as gay. These participants were excluded from the experimental sample, which comprised thirty women and thirty-six men, whose ages ranged from nineteen to thirty years ( $M = 22.53$ ,  $SD = 2.70$ ).

**Procedure.** The experimental material and procedure were the same as the study 1. After reading each parent description, participants were asked to estimate the likelihood that the son of each set of parents would show an interest in four activities: two activities were stereotypically feminine (i.e., liking art and literature as school subjects; liking fashion and watching fashion shows) and two were stereotypically masculine (i.e., liking science and technology as school subjects; liking playing football and watching football matches). Participants provided their answer by means of a seven-point scale, ranging from 1 (*not at all likely*) to 7 (*very much likely*). Participants rated the anticipated sexual orientation of the son once he grew up on a seven-point scale, ranging from 1 (*exclusively homosexual*) to 7 (*exclusively heterosexual*). Participants rated the likelihood that the son would be bullied on a seven-point scale, ranging from 1 (*not at all likely*) to 7 (*very much likely*). As in study 1, participants' evaluation of the parents was assessed. At the end of the questionnaire, participants reported their own gender, age, and sexual orientation.

## Results

**Gender stereotyping.** Participants' ratings on the feminine ( $.49 \leq rs \leq .65$ ,  $ps < .001$ ) and on the masculine stereotypical activities ( $.31 \leq rs \leq .67$ ,  $ps < .01$ ) were significantly and positively correlated. A gender-stereotyping index was created by subtracting participants' averaged ratings on the masculine stereotypical activities from the averaged ratings on the feminine stereotypical activities. Lower scores on the gender-stereotyping index indicated a higher masculine over feminine stereotyping of the son. The gender-stereotyping index was analyzed by means of an ANOVA, 4 (parent description: He vs. GMM vs. GMF vs. GFF)  $\times$  2 (participant gender: female vs. male), with the former variable as a within-participants factor and the latter as a between-participants factor. Results indicated a main effect of the parent description,  $F(3, 62) = 12.36$ ,  $p < .001$ ,  $\eta_p^2 = .37$  (see Table 2). Pairwise comparisons showed that the son was equally stereotyped as masculine in the He and GMM ( $p = 1$ ) parent description (both means differed from zero, one-sample  $t$  test,  $ps < .05$ ). Although no difference occurred between the He and the GMF ( $p = .63$ ), participants stereotyped the son as less masculine (one-sample  $t$  test, test value = 0,  $ps < .05$ ) in the GMF than the GMM parent description ( $p < .01$ ). Finally, the son was stereotyped as more feminine in the GFF (one-sample  $t$  test, test value = 0,  $ps < .05$ ) than in all the other parent descriptions ( $ps < .001$ ). Neither the main effect of the participant gender  $F(1, 64) = 0.69$ ,  $p = .41$ ,  $\eta_p^2 = .01$  nor the participant gender by target description interaction was significant,  $F(3, 62) = 1.25$ ,  $p = .30$ ,  $\eta_p^2 = .06$ .

**Table 2.** Mean (Standard Error) Scores for Anticipated Gender Stereotyping, Sexual Orientation, and Likelihood of Being Bullied of the Son as a Function of Parents' Sexual Orientation, and Gender Role of Gay-male Parents in Study 2.

Variable	Scoring	He	GMM	GMF	GFF
Gender stereotyping	High score = feminine stereotyping of the son	-0.61 (0.13) <sup>a,b</sup>	-0.83 (0.16) <sup>a</sup>	-0.31 (0.11) <sup>b</sup>	0.74 (0.11) <sup>c</sup>
Son's anticipated heterosexual orientation	1-7: High score = straight	4.65 (0.12) <sup>a</sup>	4.07 (0.10) <sup>b</sup>	4.10 (0.11) <sup>b</sup>	3.84 (0.13) <sup>b</sup>
Likelihood of being bullied	1-7: High score = likely to be bullied	3.19 (0.14) <sup>a</sup>	4.94 (0.15) <sup>b</sup>	4.86 (0.15) <sup>b</sup>	4.96 (0.17) <sup>b</sup>

Note:  $n = 72$ . He = heterosexual couple; GMM = gay-male parents both described as masculine; GMF = gay-male parents, one described as masculine and one as feminine; GFF = gay-male parents both described as feminine. Mean scores denoted with different superscript letters statistically differ from each another.

**Anticipated sexual orientation of the son.** Participants' ratings on the sexual orientation item were analyzed by means of the same ANOVA model as before. A main effect of parent description was found,  $F(3, 62) = 7.61, p < .001, \eta_p^2 = .27$  (see Table 2). Participants reported it was more likely that the son raised by the He would develop as heterosexual than the son raised by the GMM ( $p < .003$ ), the GMF ( $p < .02$ ), and the GFF ( $p < .001$ ). No differences occurred between the GMM and the GMF ( $p = 1$ ) in terms of anticipated sexual orientation of the son. Also, participants' ratings in the GFF did not significantly differed from ratings in the GMF parent description ( $p = .23$ ) and in the GMM parent description ( $p = .06$ ). Neither the main effect of the participant gender  $F(1, 64) = 0.62, p = .43, \eta_p^2 = .01$  nor the participants' gender by target description interaction was significant,  $F(3, 62) = 2.20, p = .10, \eta_p^2 = .10$ .

**Likelihood of being bullied.** Participants' ratings of the likelihood of being bullied were analyzed by means of the same ANOVA as before. Results indicated a significant main effect of the parent description  $F(3, 62) = 28.41, p < .001, \eta_p^2 = .58$  (see Table 2). Pairwise comparisons showed that participants estimated a son raised by He as less likely to be bullied than a son raised by all the gay-male parents (i.e., GMM:  $p < .001$ ; GMF:  $p < .001$ ; GFF:  $p < .001$ ). No differences occurred between the gay-male parent descriptions ( $ps = .1$ ). The main effect of participant gender was not significant,  $F(1, 64) = 0.99, p = .32, \eta_p^2 = .02$ . The parent description by participant gender interaction was not significant  $F(3, 62) = 0.50, p = .69, \eta_p^2 = .02$ .

*Evaluation of the parents.* Participants' ratings of the parent evaluation were analyzed by means of the same ANOVA as before. Results indicated a significant main effect of the parent description  $F(3, 62) = 28.30, p < .001, \eta_p^2 = .58$  (see Figure 1). Pairwise comparisons showed that participants reported a more positive evaluation of the He ( $M = 1.41, SE = .15$ ) than all the gay-male parent descriptions (i.e., GMM:  $M = -0.51, SE = .14, p < .001$ ; GMF:  $M = -0.57, SE = .14, p < .001$ ; GFF:  $M = -0.44, SE = .16, p < .001$ ). No differences between the evaluations of the gay-male parent descriptions were found ( $ps = .1$ ). No significant effect of participant gender was found,  $F(1, 64) = 0.03, p = .86, \eta_p^2 = .001$ . The parent description by participant gender interaction was not significant  $F(3, 62) = 0.88, p = .45, \eta_p^2 = .04$ .

## Discussion

Results of study 2 fully replicated findings of study 1. Indeed, participants stereotyped the son as masculine in the heterosexual parent description, and this level of gender stereotyping did not differ from the GMM and GMF parent description. Importantly, the son of the GFF was stereotyped as more feminine. Hence, this pattern of results attests that the level of gender stereotyping is molded by the parent-related gender-role information regardless of their sexual orientation. Moreover, the son was anticipated as more likely to develop as heterosexual if raised by heterosexual parents than by gay-male parents, and no differences existed between the different gay-male parents description in terms of this variable. Similarly to study 1, the anticipated sexual orientation and gender stereotyping of the son were influenced by two distinct sources of information, the former being mainly driven by the sexual orientation of the parents and the latter exclusively by their gender-role conformity of the parents. Replicating the results of study 1, the evaluation of the parents was driven by their sexual orientation rather than by their degree of gender-role conformity of the gay-male parents, as the heterosexual parents were evaluated in a more positive manner than the all the gay-male parents. Finally, participants judged more likely that the son of gay-male parents would be bullied than the son of the heterosexual parents, regardless of the level of gender-role conformity of the gay-male parents.

In the third study, we intended to replicate findings of studies 1 and 2 on the anticipated sexual orientation of the son and the evaluation of the parents. Also, we sought to confirm results of the study 2 on the estimated likelihood of being bullied. Importantly, and differently from studies 1 and 2, we tested the relative and distinct contribution of parents' sexual orientation and gay-male parent gender-role conformity in shaping participants' hypotheses on the psychological development of the son on both feminine-stereotypical and gender-irrelevant dimensions.

## Study 3

### Method

**Participants.** One hundred and eighteen Italian undergraduate students took part in the experiment. Four participants selfdefined as neither heterosexual nor gay/lesbian, three participants selfdefined as gay, and one participant did not report their sexual orientation. These participants were excluded from the experimental sample, which comprised seventy-two women and thirty-eight men, whose age ranged from eighteen to thirty-nine years ( $M = 20.29$ ,  $SD = 2.75$ ).

**Procedure.** The experimental procedure and material were the same as the studies 1 and 2. After reading each parent description, participants had to estimate the extent to which the son of each couple would show a “normal” development on four psychological domains: one domain was stereotypically feminine (i.e., affective development) and three domains were irrelevant with respect to gender stereotypes (i.e., learning, psychological adjustment, and language skills). Participants provided their answers by means of a seven-point scale, ranging from 1 (*not at all normal*) to 7 (*fully normal*). Participants rated the sexual orientation of the son as in study 1. Participants rated the likelihood that the son would be bullied as in study 2. As in studies 1 and 2, participants’ evaluation of the parents was assessed. At the end of the questionnaire, participants reported their own gender, age, and sexual orientation. Participants’ endorsement of religious beliefs was also assessed but not analyzed in the current study.

**Psychological development.** Participants’ ratings on the three gender-irrelevant domains showed a good reliability (Cronbach’s  $\alpha$  ranged between .67 and .79) and were averaged for each parent description separately. Higher scores indicated normal-oriented development on psychological domains that were gender irrelevant. An ANOVA, 4 (parent description: He vs. GMM vs. GMF vs. GFF)  $\times$  2 (participant gender: female vs. male) on these ratings revealed a significant main effect of the parent description  $F(3, 106) = 12.86$ ,  $p < .001$ ,  $\eta_p^2 = .27$  (see Table 3). Pairwise comparisons showed that participants estimated a more normal development of a son raised by He than by all the gay-male parent descriptions (i.e., GMM:  $p < .001$ ; GMF:  $p < .001$ ; GFF:  $p < .001$ ). No differences occurred between the gay-male parent descriptions on this variable ( $ps = .1$ ). The main effect of the participant gender was not significant,  $F(1, 108) = 1.54$ ,  $p = .22$ ,  $\eta_p^2 = .01$ . The parent description by participant gender interaction was not significant  $F(3, 106) = 0.88$ ,  $p = .46$ ,  $\eta_p^2 = .02$ .

The same ANOVA was conducted on participants’ ratings of the stereotypically feminine domain. A significant main effect of parent description was found  $F(3, 105) = 14.75$ ,  $p < .001$ ,  $\eta_p^2 = .30$  (see Table 3). Pairwise comparisons showed that participants estimated a similar and normal manner of development in the son raised by He and GFF ( $p = .13$ ; both means differed from four, one-sample  $t$ -test,  $ps < .05$ ).

**Table 3.** Mean (Standard Error) Scores for Anticipated Psychological Development, Sexual Orientation, and Likelihood of Being Bullied of the Son as a Function of Parents' Sexual Orientation, and Gender Role of Gay-male Parents in Study 3.

Variable	Scoring	He	GMM	GMF	GFF
Gender-irrelevant psychological domain	1–7: High score = normal-oriented development	6.19 (0.09) <sup>a</sup>	5.86 (0.10) <sup>b</sup>	5.89 (0.09) <sup>b</sup>	5.92 (0.10) <sup>b</sup>
Stereotypically feminine psychological domain	1–7: High score = normal-oriented development	5.98 (0.11) <sup>a</sup>	5.19 (0.14) <sup>c</sup>	5.50 (0.13) <sup>b</sup>	5.71 (0.14) <sup>a,b</sup>
Son's anticipated heterosexual orientation	1–7: High score = straight	5.15 (0.13) <sup>a</sup>	4.53 (0.12) <sup>b</sup>	4.60 (0.12) <sup>b</sup>	4.56 (0.12) <sup>b</sup>
Son's anticipated homosexual orientation	1–7: High score = gay	3.89 (0.12) <sup>a</sup>	4.32 (0.11) <sup>b</sup>	4.27 (0.11) <sup>b</sup>	4.38 (0.12) <sup>b</sup>
Likelihood of being bullied	1–7: High score = likely to be bullied	3.27 (0.14) <sup>a</sup>	4.83 (0.15) <sup>b</sup>	4.87 (0.13) <sup>b</sup>	5.04 (0.12) <sup>b</sup>

Note:  $n = 118$ . He = heterosexual couple; GMM = gay-male parents both described as masculine; GMF = gay-male parents, one described as masculine and one as feminine; GFF = gay-male parents both described as feminine. Mean scores denoted with different superscript letters statistically differ from each another.

Also, the son was thought of developing in a less normal manner in the GMF ( $p = .001$ ) than in the He parent description but in a similar fashion as the son in the GFF parent description ( $p = .10$ ). Finally, the son raised by the GMM parent was thought to develop in a less normal fashion than in the three other parent descriptions ( $ps < .03$ ). The main effect of the participant gender was significant,  $F(1, 107) = 8.86, p = .004, \eta_p^2 = .08$ , indicating that female participants ( $M = 5.91, SE = .13$ ) estimated an overall more normal development than male participants ( $M = 5.28, SE = .17$ ) on this female stereotypical domain. The parent description by participant gender interaction was not significant  $F(3, 105) = 0.65, p = .58, \eta_p^2 = .02$ .

**Anticipated sexual orientation of the son.** Participants' ratings on the sexual orientation items were analyzed by means of an ANOVA, 4 (parent description: He vs. GMM vs. GMF vs. GFF)  $\times$  3 (child sexual orientation: heterosexual vs. bisexual vs. homosexual)  $\times$  2 (participant gender: female vs. male), with the two former variables as within-participants factors and the latter as a between-participants factor. A main



effect of sexual orientation was found,  $F(2, 105) = 13.92, p < .001, \eta_p^2 = .21$ , which was further qualified by the interaction with the parent description,  $F(6, 101) = 5.11, p < .001, \eta_p^2 = .23$  (see Table 3). Participants considered it more likely that the son raised by the He would develop as heterosexual than the son raised by the GMM ( $p < .001$ ), the GMF ( $p < .001$ ), and the GFF ( $p < .001$ ). No differences occurred between the gay-male parent descriptions on the variable in question ( $ps = 1$ ). Also, as far as the estimation of the bisexuality of the son is concerned, no differences occurred between parent descriptions  $F(3, 104) = 2.12, p = .10, \eta_p^2 = .06$ . Participants considered it less likely that the son raised by the He would develop as gay than the son of the GMM ( $p = .01$ ), the GMF ( $p = .01$ ), and of the GFF ( $p = .002$ ). No differences occurred between the gay-male parent descriptions on the variable in question ( $ps = 1$ ). The parent description by sexual orientation by participant gender interaction was not significant  $F(6, 101) = 2.141, p = .06, \eta_p^2 = .11$ .

*Likelihood of being bullied.* Participants' ratings of the likelihood of being bullied were analyzed by means of the same ANOVA model. Results indicated a significant main effect of the parent description  $F(3, 103) = 38.94, p < .001, \eta_p^2 = .53$ . Pairwise comparisons showed that participants estimated the likelihood of being bullied to be lower for the son raised by the He than all the gay-male parents (i.e., GMM:  $p < .001$ ; GMF:  $p < .001$ ; GFF:  $p < .001$ ). No differences occurred between the gay-male male parent descriptions ( $ps > .32$ ). The main effect of participant gender was not significant,  $F(1, 105) = 0.08, p = .78, \eta_p^2 = .001$ . The parent description by participant gender interaction was not significant  $F(3, 103) = 1.21, p = .31, \eta_p^2 = .03$ .

*Evaluation of the parents.* Participants' evaluations of the parents were analyzed by means of the same ANOVA model as above. Results indicated a significant main effect of the parent description  $F(3, 104) = 29.50, p < .001, \eta_p^2 = .46$  (see Figure 1). Pairwise comparisons showed that participants reported more positive evaluations of the He parents than all the gay-male parents (i.e., GMM:  $p < .001$ ; GMF:  $p < .001$ ; GFF:  $p < .001$ ). No differences between the evaluations of the homosexual parent descriptions were found ( $ps > .16$ ). No significant effect of participant gender was found,  $F(1, 106) = 0.20, p = .66, \eta_p^2 = .002$ . The parent description by participant gender interaction was not significant  $F(3, 104) = 1.27, p = .29, \eta_p^2 = .04$ .

## Discussion

The results of study 3 revealed a strong interplay between the characteristics of the parents (i.e., their sexual orientation and their level of gender-role conformity) and the domain of the son's psychological adjustment (i.e., stereotypically feminine or gender irrelevant). Indeed, participants predicted a worse development for sons raised by gay-male than heterosexual parents, when the psychological domain was gender-irrelevant. This pattern of results is in line with previous evidence showing that a general better development was attributed to children of heterosexual than

gay-male parents (Baiocco et al. 2013; McLeod, Crawford, and Zechmeister 1999; Morse, McLaren, and McLachlan 2008). By contrast, when the psychological domain was stereotypically female, a different pattern of results emerged. Indeed, participants judged the son raised by He and the GFF, and at least in part by GMF, as equally and normally developed in terms of affective skills, while they considered the son raised by the GMM as having a lower development on this skill. Hence, when the psychological domain was considered as stereotypically feminine, being gay and masculine (i.e., the gender-role conformity gay-male parents) negatively interfered with and indeed attenuated the psychological development of this stereotypically feminine dimension.

Replicating results of studies 1 and 2, the son was perceived as more likely to be heterosexual when raised by heterosexual than gay-male parents. No differences occurred between the different gay-male parent descriptions. Similarly, participants estimated that the son was more likely to develop as gay when raised by gay-male parents than by heterosexual parents. Again, as in study 1, the probability of being bisexual was unaffected by the parent descriptions. The estimated probability of being bullied was equal between the sons of gay-male parents and higher than the son of the heterosexual parents, thus replicating the results of study 2. Moreover, and in line with findings of studies 1 and 2, participants expressed less positive attitudes toward the gay-male parents than the heterosexual parents, indicating that the evaluative reactions were driven by the sexual orientation information and not by the degree of gay-male parent gender-role conformity.

## **General Discussion**

This set of studies aimed to gain a deeper understanding of the origins of beliefs about the development of a son raised by gay-male couple and of the attitudes toward these parents in the Italian context. Similarly to previous research on this issue, in three studies, we experimentally manipulated the sexual orientation of the parents (i.e., heterosexual vs. gay-male parents). The novelty of these studies relied on the experimental variation of the gender-role conformity of the gay-male parents, while keeping constant the level of gender-role conformity of the heterosexual parents. This experimental design allowed us to assess the different contribution of these types of information on the expected sexual orientation and gender-role development of the son raised by these couples.

Our findings consistently showed that the beliefs of the sexual orientation of the son were modeled by the sexual orientation of the parents. Across three studies, we found that the son of heterosexual parents was thought to develop as heterosexual to a greater extent than the son of gay-male parents, regardless of the gender-role conformity of these gay-male parents. Thus, we could conclude that it was not the level of gender-role conformity of the gay-male parents but their sexual orientation that accounted for participants' expectations about the sexual orientation of the sons raised by these parents.

Furthermore, the gender-role conformity of the son mapped onto the gender-role conformity of the parents, regardless of the sexual orientation of the parents. Indeed, when the gay-male couples were either strongly or moderately gender-role conforming, their son was expected to develop as masculine (study 1), and display preference for masculine over feminine stereotypical activities (study 2) as the son of the heterosexual couple. However, gay-male parents that displayed gender-role conformity did not always assure a gender-role development comparable to the son raised by heterosexual parents. Indeed, study 3 demonstrated that a son raised by gay-male parents, who displayed strongly or moderately gender nonconforming features, was anticipated to show similar (and normal-range) affective development as the son raised by the heterosexual couple. This result is particularly informative about the role of masculinity in gay-male couples, as having two masculine fathers may be supposed to negatively interfere with the psychosocial development of the son on feminine-stereotypical dimensions (e.g., affective development).

By experimentally dissociating the sexual-orientation and the level of gender-role conformity of the gay-male parents, this set of studies demonstrates that distinct factors differently drive participants' expectations about the sexual orientation and the gender-role development of the son raised by gay-male couple, and rules out the possibility that beliefs about the sexual orientation of the son raised by gay-male parents stem from an anticipated gender nonconformity development of the son (Blashill and Powlishta 2009; Martin 1990, 1995).

Also, our results consistently showed that the sexual orientation of the parents affected participants' beliefs beyond the anticipated sexual orientation of the son. First, and confirming previous results (Clarke 2001; Pennington and Knight 2011), studies 2 and 3 showed that the sexual orientation of the parents, and not their level of gender-role conformity, was thought to account for the probability of being bullied. Second, and in line with previous research (Baiocco et al. 2013; McLeod, Crawford, and Zechmeister 1999; Morse, McLaren, and McLachlan 2008), parenting abilities were questioned when parents were described as being of the same-sex. Indeed, our findings demonstrated a unique effect of the sexual orientation of the parents on the psychological development of the son regarding gender-irrelevant dimensions. However, these findings may be driven by a specific subset of beliefs about gay-male parents. Indeed, gay-male parents are also stereotypically represented as emotionally unstable, and this may contribute to the belief that they are unable to create a healthy environment for their son (for a similar account, see McLeod, Crawford, and Zechmeister 1999; Page and Yee 1986; Testa, Kinder, and Ironson 1987).

Finally, across three studies, we showed that attitudes toward gay-male parents were shaped by their sexual orientation. Previous findings have demonstrated that men who displayed feminine features and gender-role nonconfirming characteristics received harsher evaluations than those who were described as masculine (Glick et al. 2007; Glick, Wilkerson, and Cuffe 2015; Hunt et al. 2016). By contrast, our findings showed that participants' evaluation of the gay-male parents was insensitive

to their level of gender-role conformity, as participants did not evaluate more negatively those who were described as feminine compared to those depicted as more masculine. It might be plausible that a more general and negative evaluation of the homosexuality, which is largely shared in the Italian context (European Union Agency for Fundamental Rights 2013; ILGA 2017; Istituto Nazionale di Statistica 2012), has overshadowed the effect of gender-role conformity information concerning the gay-male parents on the evaluation of these parents. In other words, participants may heavily base their evaluation upon category-related negative attitudes and disregard the individuating information concerning gay-male parents' level of gender-role conformity (Fiske and Neuberg 1990).

Differently from research demonstrating a stronger sexual prejudice in male than female samples, the abovementioned results were not moderated by participants' gender. Likewise for gender stereotypes, heterosexual men and women have access to societal-level frameworks that support a heteronormative view on parenthood—that consider the heterosexual parenthood as the social default—and plausibly end up endorsing this ideology to a similar extent (Bailey and LaFrance 2017).

Our findings are related to the debate about beliefs of the origins of sexual orientation (Haslam and Levy 2006; Hegarty and Pratto 2001). Indeed, at least in our experimental sample, participants likely share an implicit theory on the transmission of the sexual orientation, namely, that the exposure to gay-male parents leads children to develop a homosexual sexual orientation. However, since we did not manipulate the origin of the son, being this a biological or adopted child, additional evidence should be gathered to show whether either a biological causation or an environment-based mechanism weight more when participants have to anticipate the sexual orientation of the son raised by gay-male parents. Also, our findings contribute to the research on heteronormative beliefs (Kitzinger 2005; Riggs 2006). Indeed, the gay-male couple which comprised a “masculine” and a “feminine” parent (i.e., gay-male parents, but with heteronormative gender roles) was the only gay-male parent couple whose child was predicted to have a similar gender-role development as the son of heterosexual parents. Moreover, this effect existed in terms of gender-role development (study 1), gender stereotyping (study 2), and typical development on female stereotypical psychological dimension (study 3). Hence, it is likely that participants believed that the exposure to a male and a female model was needed to meet the needs of the son, at least in terms of gender-role development.

Finally, different limits of the present research should be acknowledged. First, we restricted the investigation to gay-male parents, thus leaving open the question of whether or not similar results would also be found in lesbian couples. Second, we manipulated the level of gender-role conformity of gay-male parents, while keeping constant the level of gender-role conformity of the heterosexual parents. Hence, future studies can orthogonally vary the sexual orientation and the gender-role conformity of both the gay and the heterosexual parents to gain a better understanding of the effect of this latter variable on the beliefs about the development of

children raised by these parents. Third, our results are anchored to a strong homophobic cultural context (i.e., the Italian context) in which same-sex adoption and surrogacy are prohibited. Hence, replicating these findings in a more egalitarian context would help to understand the role of societal-level variables in shaping the beliefs about same-sex parenthood and the development of their children.

In conclusion, we deem our results can be of practical use for policy makers as well as civil rights activists. As we mentioned above, opponents of equal marriage have often fueled the public discourse with the unsupported beliefs of the negative consequences of same-sex parenting for the healthy development of children. As beliefs can guide future behaviors and decisions as well as influence policy support, understanding the core features of these beliefs and how these can be feed it is of extreme importance to challenge them.

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